

RES402 Data Analysis in Health

School: School of Health - Biomedicine

2027 | Session 1

UniSC Sunshine Coast
UniSC Moreton Bay

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Please go to unisc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

This course will develop your knowledge and skills in collecting, managing, analysing, and interpreting research data with integrity and confidence. You will explore sampling methods and approaches to preparing for data collection and interpretation of both quantitative and qualitative data. Through online modules and practical exercises, you will gain hands-on experience using software such as NVivo, Excel, SPSS, and Prism to manage and analyse data. The course includes a core set of foundational content, along with a selection of optional modules that you can choose to support the specific needs of your research project.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Online learning materials in a recorded format with interactive (H5P) modules and formative (revision) quizzes.	2hrs	Orientation week	10 times
Tutorial/Workshop 1 – Interactive small class workshops with skill development and collaborative learning.	3hrs	Orientation week	2 times

1.3. Course Topics

1. Sampling methods and techniques
2. Data collection instrument design
3. Variables, measurements, and data preparation
4. Data management principles
5. Foundations of statistics
6. Descriptive statistics and data visualisation
7. Data analysis for qualitative and review-based studies

Students may choose from the following modules based on the relevance to their research project.

A) Quantitative research techniques (Inferential Statistics: Group comparisons, Multi-group and repeated measures, Relationships and associations categorical data and risk ratios; Advanced statistical techniques (e.g., regression, modelling).

B) Qualitative research techniques (Designing and conducting interviews and focus groups, document and textual analysis, using NVivo for qualitative data management and analysis, validation studies and Delphi methods).

C) Review-based research techniques (Systematic review design and execution, scoping reviews and evidence mapping, critical appraisal and synthesis of literature).

2. What level is this course?

400 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Manage research data with integrity by applying sound principles of data collection, sampling, and data preparation.	Ethical Organisation
2 Use appropriate software tools to support the effective analysis of research data.	Knowledgeable Applying technologies
3 Visualise and critically evaluate research outputs to draw meaningful conclusions and identify limitations where relevant.	Knowledgeable Problem solving

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of "pre-requisites, co-requisites and anti-requisites".

5.1. Pre-requisites

Must be enrolled in BH003 or BH004 or BH005 or BH006 or BH007

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

5.5. Microcredential Information

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Limited Grading (PNP)

Pass (PU), Fail (UF). All assessment tasks are required to be passed for successful completion of the course.

6.2. Details of early feedback on progress

The course includes two workshops where you can discuss your research project, explore options for data collection and analysis, and receive early formative feedback from instructors and peers. These sessions are designed to help you reflect on and refine your approach, build confidence, and apply course concepts effectively in your own research.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Activity Participation	Individual	Interactive (H5P) modules and formative (revision) quizzes.	Throughout teaching period (refer to Format)	Online Submission
All	2	Activity Participation	Individual	2 x 3 hour workshops	Throughout teaching period (refer to Format)	In Class

All - Assessment Task 1: Completion of online modules

GOAL:	For you to regularly engage in the theoretical components of the course to facilitate your learning and skill development.		
PRODUCT:	Activity Participation		
AUTHORSHIP STATEMENT:			
FORMAT:	Online - refer to Canvas for submission dates		
CRITERIA:	No.		Learning Outcome assessed
	1	Accurate completion of interactive data management activities.	1
	2	Demonstration of understanding of data integrity, sampling, and preparation principles.	1
GENERIC SKILLS:	Problem solving, Applying technologies		

All - Assessment Task 2: Participation in workshop activities

GOAL:	For you to engage in the practical components of the course to facilitate your learning and skill development.												
PRODUCT:	Activity Participation												
AUTHORSHIP STATEMENT:													
FORMAT:	In class - refer to Canvas for submission dates												
CRITERIA:	<table border="1"><thead><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr></thead><tbody><tr><td>1</td><td>Appropriate application of software tools for data analysis</td><td>1 2 3</td></tr><tr><td>2</td><td>Ability to visualise and interpret research data accurately.</td><td>1 2 3</td></tr><tr><td>3</td><td>Engagement in collaborative data problem-solving.</td><td>1 2 3</td></tr></tbody></table>	No.		Learning Outcome assessed	1	Appropriate application of software tools for data analysis	1 2 3	2	Ability to visualise and interpret research data accurately.	1 2 3	3	Engagement in collaborative data problem-solving.	1 2 3
No.		Learning Outcome assessed											
1	Appropriate application of software tools for data analysis	1 2 3											
2	Ability to visualise and interpret research data accurately.	1 2 3											
3	Engagement in collaborative data problem-solving.	1 2 3											
GENERIC SKILLS:	Communication, Collaboration, Problem solving, Applying technologies												

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

There are no required/recommended resources for this course.

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

This course will be graded as Pass in a Limited Grade Course (PU) or Fail in a Limited Grade Course (UF) as per clause 5.1.1.3 and 5.1.1.4 of the Grades and Grade Point Average (GPA) - Academic Policy.

In a course eligible to use Limited Grades, all assessment items in that course are marked on a Pass/Fail basis and all assessment tasks are required to be passed for a student to successfully complete the course. Supplementary assessment is not available in courses using Limited Grades.

This course is offered on a pass/fail basis, focusing on practical skill development rather than graded assessment. It is designed to provide resources, training, and hands-on experience in data management, analysis, and interpretation that are directly relevant to your research project. The course includes a core set of foundational modules, alongside optional modules that you can select based on the specific needs of your project. This flexibility allows you to tailor your learning to your research context without adding unnecessary workload, making the course supportive, manageable, and practical. Together with the workshops and early formative feedback, this structure ensures that you can develop confidence and competence in analysing your data, apply new skills effectively, and progress in your research with guidance and support, all within a low-stress, student-centred environment.

10.3. Assessment: Submission penalties

You must contact your Course Coordinator and provide the required documentation if you require an extension or alternate assessment.

Refer to the Assessment: Courses and Coursework Programs – Procedures.

10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.6. General Enquiries

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- [UniSC Student Central](#)
- [UniSC Adelaide Student Central](#)